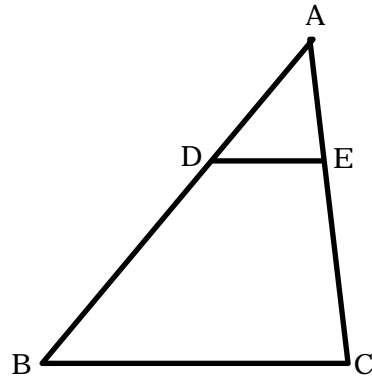


5章(相似と比) 2節(図形と比)

1. 三角形と比

年 組 番

名前

1. 次の図で、 $BC \parallel DE$ のとき、 a, b の値を求めなさい。

$AD = 3 \text{ cm}$, $AE = a \text{ cm}$, $DE = 2.5 \text{ cm}$,
 $AB = 9 \text{ cm}$, $AC = 6 \text{ cm}$, $BC = b \text{ cm}$

$$AE : AC = AD : AB$$

$$a : 6 = 3 : 9$$

$$9a = 18$$

$$a = 2$$

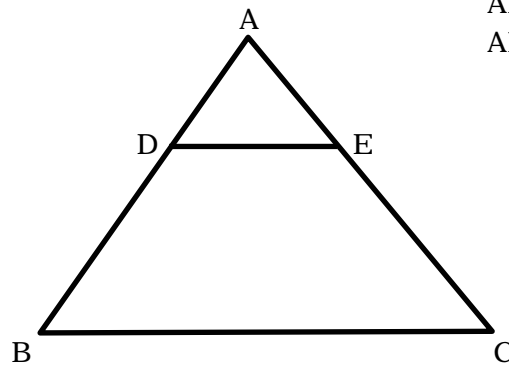
$$DE : BC = AD : AB$$

$$2.5 : b = 3 : 9$$

$$3b = 22.5$$

$$b = 7.5$$

$$\underline{a = 2, b = 7.5}$$



$AD = 4 \text{ cm}$, $AE = a \text{ cm}$, $DE = b \text{ cm}$,
 $AB = 10 \text{ cm}$, $BC = 15 \text{ cm}$, $EC = 4.5 \text{ cm}$

$$AE : EC = AD : DB$$

$$a : 4.5 = 4 : (10 - 4)$$

$$6a = 18$$

$$a = 3$$

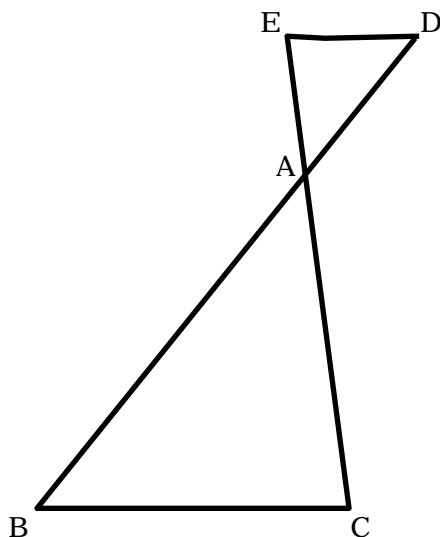
$$DE : BC = AD : AB$$

$$b : 15 = 4 : 10$$

$$10b = 60$$

$$b = 6$$

$$\underline{a = 3, b = 6}$$



$DE = 10 \text{ cm}$, $AE = a \text{ cm}$, $AD = 8 \text{ cm}$,
 $BC = b \text{ cm}$, $AB = 12 \text{ cm}$, $AC = 9 \text{ cm}$

$$AE : AC = AD : AB$$

$$a : 9 = 8 : 12$$

$$12a = 72$$

$$a = 6$$

$$DE : BC = AD : AB$$

$$10 : b = 8 : 12$$

$$8b = 120$$

$$b = 15$$

$$\underline{a = 6, b = 15}$$